

A B S T R A C T

~~OPTICAL TRANSMISSION SYSTEM USING COHERENT OPTICAL TIME
DOMAIN REFLECTOMETRY~~

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10 The invention concerns a method of reducing
interaction between the signal in one transmission
direction (2) and backscattered noise originating from
the other transmission direction (1) in an amplified and
non-bi-directional fiber optic link including optical
loopback (18, 19, 21) of the amplifiers (13, 14; 15, 16)
to enable COTDR (coherent optical time domain
reflectometry); it is characterized by widening the
spectrum of the signal in at least one transmission
15 direction, for example by wavelength modulation. The
modulation is simply effected by modulating the injection
carrier of a laser (3) used as an sender, for example.
Modulation at a low frequency - in the order of 1 kHz -
is appropriate. This is a simple way to reduce
20 interaction, whilst enabling COTDR. The invention also
concerns a link implementing the method.

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Translation of the title and the abstract as they were when originally filed by the
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